ONCHIT HIT Policy Committee
Information Exchange Workgroup

ePrescribing Today: Adoption Successes & Challenges, Part I

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General Themes

1. How would you describe the current state of electronic prescribing?
   ePrescribing, while far behind expectations of most in the industry, is growing "on the steep part of the curve." Much of the growth is related to implementation of full EHR applications, but stand-alone ePrescribing is also playing a significant role.

2. What are the technological challenges surrounding electronic prescribing?
   Lack of standards remains a serious issue that keeps ePrescribing from reaching its maximum potential. Internet connectivity has improved dramatically but can still be a problem in some rural areas. For users insistent on handheld devices, screen size and input method hamper effectiveness.

3. What are the business case impediments to electronic prescribing?
   The greatest beneficiaries of ePrescribing are the health plans and employers (and PATIENTS), but payors are generally unwilling to pay for physicians to adopt the technology. Physicians receive marginal benefits from ePrescribing but have to shoulder most of the burden, which includes both cost of system and equipment, workflow change, training, and, in some cases, schedule disruption (the last issue is atypical for ePrescribing but common for EHR implementation).

4. What are the operational impediments to electronic prescribing?
   Physicians, once eRx enters their environment, might now universally adopt which leads to 2 workflows in the office. This makes it very difficult for the staff to use, which in turn makes it more difficult for the prescribers to use. Interfaces to other office software (esp. PMIS systems). Perceived slowing of office workflow, at least initially, has not been found by our implementation staff to be a real issue, but still slows adoption by those who do not believe.

5. What are the regulatory impediments to electronic prescribing?
The Federal Government has done an excellent job of testing and driving standards and incentivizing prescribers, but may need to do more to standardize certain areas, most notably eliminating individual state rules regarding prescription format, specific requirements regarding paper prescriptions and special paper/forms, certification requirements, and even variances of controlled drug schedules (example: Soma is a controlled drug in Texas). These state variances hamper national vendors from generating appropriate enhancements to inexpensive ePrescribing solutions by increasing development to conform to those state requirements. For example, Indiana *recently* passed a requirement that only certain vendors can be used for controlled drug prescription paper, the forms must be quarter-page size, and have numbers to circle and check boxes to check, which is very difficult to register correctly for a large variety of web browsers and printers. Ohio has a strict certification process without a consolidated written implementation guide. Many states have very specific requirements ("Substitution Permitted" signature line must be on the lower right…or for other states on the lower left) regarding paper prescriptions. And Maryland is now going to require each ePrescribing company and each EHR company that generates electronic prescriptions to undergo 3rd party certification, currently ENIAC—if different states require different certifications, this could be quite time consuming and expensive for vendors.

Finally, and probably most importantly, the Federal Government needs to legalize ePrescribing of controlled substances. Requiring a separate workflow for controlled drug prescriptions has hampered adoption and for some prescribers has eliminated the desire to even try ePrescribing. DrFirst, Mass Dept of Public Health, Berkshire Health Systems, Brandeis University, and eRx Networks are currently involved in a DEA-waivered project in Berkshire County, MA to send controlled-drug prescriptions electronically, and it has been very well received.

6. What's a priority to facilitate easier/broader adoption and use of electronic prescribing systems even if not immediately actionable?
CMS has done a very good job with MIPPA and ARRA in getting providers to think about this. Thank you for that.
ePrescribing of controlled drugs is still a major sticking point (discussed above), and the DEA needs to submit a suitable final rule.

Medicaid formulary/benefits/medication history is still not available electronically to ePrescribing systems in most states – this still needs to be addressed
VA/military information is similarly lacking. Many of these patients end out outside their insular systems, and their information should be available too.
Payor incentives (not just CMS)

7. What best practices would you recommend in this area?
   Please see Surescripts Best Practices for Implementing ePrescribing (attached). DrFirst was instrumental in helping Surescripts develop these.

Specific Themes:

8. Where can e-prescribing help with medication reconciliation and adverse drug interaction detection? What works today, and how can this be improved going forward?
   E-Prescribing and patient medication history can provide caregivers in the inpatient setting valuable information about a patient at time of admission. This information can help prevent mediation errors as well as duplicate therapy. A good example would be a patient who was taking a medication that was then stopped as an outpatient, as they were becoming ill, but then as they worsened and required hospitalization was not mentioned as a current outpatient medication. This is a frequent occurrence, and that medication could still be present in the patient's system, "waiting" to interact with an inpatient medication. E-Prescribing also is very valuable upon discharge for a patient so that the provider can make appropriate changes to medication therapy based upon a patient-specific formulary versus the hospital formulary of medications; by doing so there is a better chance that the patient will continue/resume the medications and the cost will be less to everybody in the system. What works today is a fully integrated hospital HIS system that incorporates this data, both from outpatient to inpatient, during the inpatient visit and from inpatient to discharge. Many facilities are beginning to put this together in pieces—medication history upon patient arrival, e-prescribing upon discharge—we are just beginning to see fully integrated services by HIS providers like MEDITECH, which has incorporated the DrFirst engine into their fully integrated offering.

9. Where are the main barriers to greater adoption likely to be found?

Providers not tech savvy enough. Control substances are primarily what providers write, but can; no hardware in the exam room

a. With the workflow and ePrescribing software applications that physicians use?
   Some eRx applications have clumsy workflow, poor flexibility, and can't adapt well with practice patterns. Providers and their staff are often hesitant to try other eRx software applications after an unsatisfactory experience.
b. In the network connecting physicians to pharmacies?
   No interactive communications between specific pharmacy and the providers. For example, a secure communication channel could allow some questions to be relayed and answered electronically, further reducing phone calls.
c. In the workflow and pharmacy software applications that pharmacists use?
   Unable to send controlled substances and electronic messaging between pharmacy and provider

9. Is affordability of an electronic prescribing system a barrier to adoption?
No, but some prescribers perceive it to be. Setup and use of ePrescribing for most physicians will be considerably less over the first 2 years than their incentive payments, to say nothing of savings from improved office efficiency.

10. How can a Drug Enforcement Administration (DEA) proposed rule on electronic prescribing of controlled substances help in the widespread adoption and use of e-prescribing? Another way to phrase might be: in What actions should DEA take to promote the electronic prescribing of controlled substances while also meeting their law enforcement needs?
Response to the DEA NPRM is attached. Our response was similar to those of several other groups. In addition to these recommendations, we add that the US Post Office be considered for identity proofing, as they already perform that function for passport applications, and also the requirement that states standardize on a single format for printed controlled substance prescriptions, perhaps outlined and distributed by the DEA.

11. What are the biggest successes and challenges in the implementation and use of e-prescribing systems?

DrFirst has participated in several huge successes in ePrescribing and proven tremendous savings in formulary compliance, generic substitution, error prevention from clinical alerts, and workflow. These include but are not limited to the Mass eRx Collaborative, CareFirst BCBS, HFHS, Blue Cross of Michigan.

12. Please describe your (or your organization's) experience adopting and using e-prescribing systems. Was the adoption experience user friendly? How could it have been made better?
The most important issue is buy-in from the providers and staff. If this is not coordinated, as it was not when we tried to implement for my group (I initially was in solo practice and then partnership prior to merging into a mid-sized group) some of the providers refused to ePrescribe, which led to inefficiencies for the staff who had to follow 2 workflows. Since the staff did not reap the full workflow benefit of 2-way pharmacy connectivity and role-based prescribing, they were less willing to push the reluctant physicians. Other important factors include a live interface with practice management software to prevent double-entry, setting preferences to approach current workflow to start, considering enhancing efficiency after buy-in and comfort with the system have been achieved, and correcting erroneous pharmacy databases that continue to FAX renewal requests despite availability of 2-way EDI.

14. Please describe your experience with the following eRX transactions
    a. Prescribing Great. Fast and powerful, and my patients love it.
    b. Retrieving and using formulary information This has been great for me with the majority of my Montgomery County, MD, patients having eligibility and formulary returned, but practicing part time I don't participate in Medicaid (which is missing)
    c. Retrieving and using medication history from claims
    d. (see also "d") This has been fantastic! Not only does this speed workflow for entering patient information, but also can remind patients of drugs or drug strengths that they often don't remember. A highlight of my eRx program is that it also prints a mini list of drugs, allergies, and diagnoses for the patient to carry with them. In addition, I was able to identify one patient who was abusing pain medications by examining their frequent prescriptions from more than one doctor.
    e. Retrieving and using dispensed drug history from pharmacies (see above)
    f. Patient initiated electronic refills from the pharmacy

My practice doesn't make a point of telling patients to call the pharmacy, but many of DrFirst's clients have their automated voice prompt systems direct their patients to do that. Since I am often not in my medical office, receiving electronic renewal requests is a great workflow enhancement for me.

13. How does electronic prescribing help fill status notification?
As part of the AHRQ-funded 2006 eRx standards testing, DrFirst tested fill status notification (FSN) in Massachusetts. Unfortunately there are 2 major problems currently: few pharmacies send this information, and it's the wrong information. Until 100% of pharmacies send FSN, what we need is NOT FILLED notification. If only a fraction of pharmacies are sending FSN, not receiving a response could mean that the patient didn't fill their prescription, or more likely that their pharmacy isn't sending FSN.

14. How can electronic prescribing help with prior authorizations?
I have worked with the NCPDP Prior Authorization Work Group, although due to other standards commitments, not as deeply as I would have liked. This would be one of the things that would really push adoption. Unfortunately, it has been slow to progress due to lack of agreement among payors and, from my somewhat distant perch, not enough willingness to compromise on language and format. In addition, electronic prior authorization might allow health plans to require prior authorization for many more products, impeding workflow. All that said, I wait expectantly for electronic prior authorization, which if done correctly, will give a huge push to ePrescribing as it fits one more time-consuming task directly into the prescribing workflow. For this to be effective, however, the electronic prior authorization system will need to minimize data entry and collect as much data as possible from the electronic system(s) prior to the prescriber or staff being presented with the prior authorization questions.

15. What are your views surrounding stand alone vs. integrated EHR solutions?
DrFirst provides both stand-alone ePrescribing and the ePrescribing functionality for many EHR solutions. The current emphasis on EHR is actually making ePrescribing worse, because it is forcing some providers into workflows that don't yet fit their practice pattern, and damaging both EHR and ePrescribing adoption for those providers. Because ARRA doesn't incentivize stand-alone ePrescribing, it will be unlikely there will be any improvement in workflow of the ePrescribing functionality of EHR applications, and this could also slow down adoption of eHealthcare applications. We applaud the potential modular approach to meaningful use and believe this "best-of-breed" solution could push

integrated EHRs to improve their products.

16. What are your views surrounding the creation, adoption, and widespread use of a standard interface for drug formulation? DrFirst is currently participating in a CMS-funded study of RxNorm. While it cannot yet replace other formulation databases, RxNorm will dramatically improve interoperability in eHealthcare, including for ePrescribing per se, but also between varying eHealthcare applications such as EHRs, HIS, etc.

17. How do you see the future of e-prescribing and enhanced or secondary uses of prescription data?
Electronic prescribing continues to improve for a number of reasons, many discussed above. Vendors are getting more experience developing the software, and users are giving more feedback, improving efficiency and workflow of the systems available. In addition, information available to point-of-care systems has increased dramatically and continues to do so, including much improved medication history response, increased formulary availability, and hopefully soon to include fill response (and perhaps "no-fill response" – see #13, above).

New features currently being tested include medication compliance assessment and messaging, improved dose-checking (based not only on age, diagnosis, weight, or body mass index, but also on evidence-based data regarding other factors or more specific factors), enhanced capabilities such as pay-for-performance monitoring and reporting, and scorecarding (comparing performance against similar professionals and providing feedback on that), and electronic prior authorization.

We are confident that electronic prescribing is safe, efficient, and cost effective for practices and patients. Thank you for this opportunity to participate in the process.